



614 Magnolia Avenue
Ocean Springs, MS 39564
Phone 228.818.9626
Fax 228.818.9631

September 9, 2010

Mr. Steve Tzhone (6SF-RA)
Superfund Remedial Project Manager
U.S. Environmental Protection Agency
Region 6
1445 Ross Avenue
Dallas, TX 75202-2773

Re: San Jacinto River Waste Pits Superfund Site – Site Warning and Protective Measures
Project Number: 090557-01.01

Dear Steve:

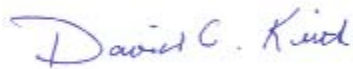
As requested in previous correspondence, the following provides a suggested design for buoy and signage placement around the San Jacinto River Waste Pits Superfund Site, shown in Figure 1. On the western side of the impoundments the signs will be placed at 100-foot intervals. On the eastern side, signs will be placed at 200-foot intervals along the shoreline, and there will be an additional warning system placed in the water with the buoy system described below. The signs on the eastern and western impoundments will alternate between the “No Trespassing” (Figure 2) and “Danger” (Figure 3) signs.

The proposed design layout for the buoy system is shown in Figure 1. The four (4) regulatory buoys are to be printed with the Restricted Area symbol (Figure 4) and the text “No Entry.” Figure 5 displays an example specifications sheet for the regulatory buoys. Additionally, there are to be twenty-five (25) 16-inch diameter float ball buoys placed between the regulatory buoys, which are intended to further discourage trespassing by watercraft. Figure 6 displays an example specifications sheet for the float ball buoys. The entire system will be connected by chain to no less than eleven (11) anchors with a nominal weight of 300 pounds each (Figure 7). Also provided are the mooring suggestions for this

type of buoy system (Figure 8). This design considers the effects of the 100-year event (i.e., water velocity and depth).

Anchor QEA coordinated with the U.S. Coast Guard (USCG), Port of Houston Authority (PHA) and Texas Parks and Wildlife. We have submitted a draft permit application to the USCG, 8th District Private Aids to Navigation Group, Mr. Tim Boriskie, for his review and comment. We contacted Mr. David Casebeer with the Port of Houston Authority Channel Development group; they do not regulate private aids to navigation on the San Jacinto River. Mr. Casebeer requested a copy of the buoy application for his records after the permit was issued by the USCG. Finally, we contacted Lt. Johnny Longoria in the Houston District Enforcement Office of Texas Parks and Wildlife; they follow or enforce the aids permitted by the USCG. He requested a copy of the permitted buoy alignment to add to their patrol enforcement list.

Sincerely,

A handwritten signature in blue ink that reads "David C. Keith".

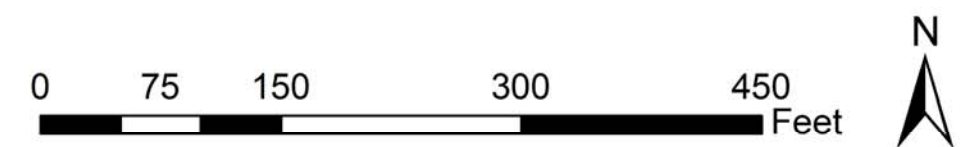
David C. Keith, PH.D., R.G., C. HG.
Anchor QEA, LLC

Cc: Andrew Shafer
Phil Slowiak

Attachments



- ▲ Sign Locations
- End Anchors
- ◆ Regulatory Buoys
- Ball Buoys



Texas Penal Code - Section 30.05. Criminal Trespass

**NO TRESPASSING
VIOLATORS WILL BE
PROSECUTED**

AUTHORIZED PERSONNEL ONLY

Codigo Penal De Texas - Seccion 30.05. Traspaso Criminal

**PROHIBIDO TRASPASAR
VIOLADORES SERAN
PROSCESADOS**

SÓLO PERSONAL AUTORIZADO

Texas luật hình sự - Phần 30,05. Hình sự xâm nhập

**KHÔNG XÂM PHẠM
NGƯỜI VI PHẠM SẼ BỊ
TRUY TỐ**

ỦY QUYỀN NHÂN ONLY

Figure 2

No Trespassing Sign

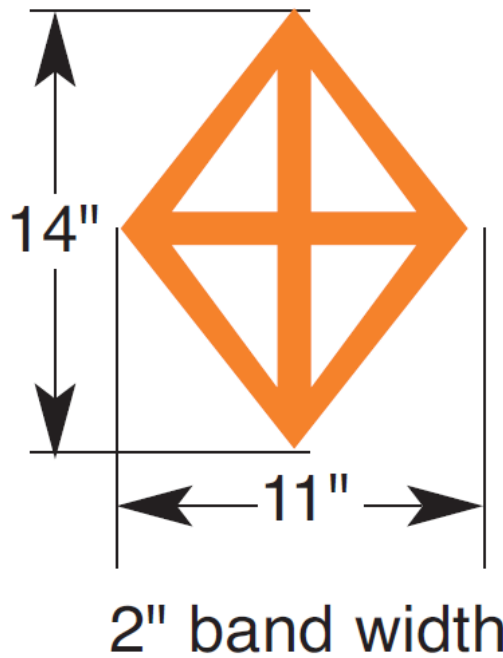
Site Warning and Protective Measures

San Jacinto River Waste Pits Superfund Site



Figure 3
Danger Sign
Site Warning and Protective Measures
San Jacinto River Waste Pits Superfund Site

RESTRICTED AREA SYMBOL



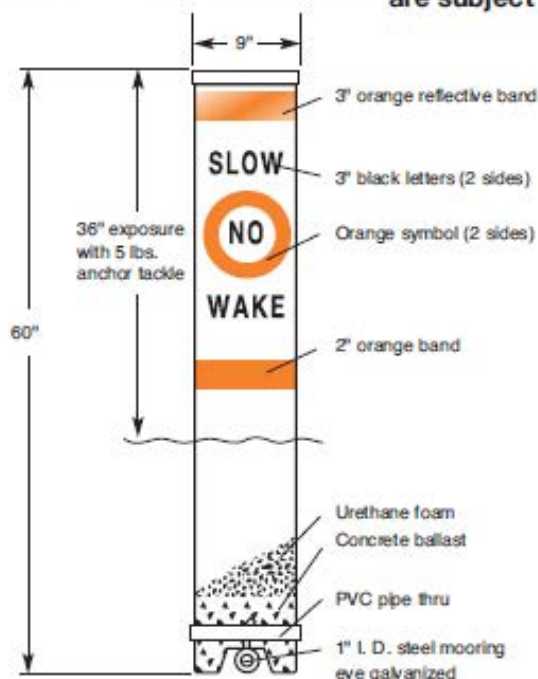
STANDARD MESSAGES

SWIM AREA
KEEP OUT
NO BOATS
BOATS KEEP OUT
CLOSED AREA
NO BOATING
DANGER DAM

Source: www.RolyanBuoys.com

Regulatory Buoys • X-Tra Heavy Duty

Super-tough regulatory buoy. Designed for problem areas where buoys are subject to abuse and vandalism.



Polyethylene type - 9" dia.

Model B961R

Features

- 9" dia. white super-tough HDPE shell. Ultraviolet inhibited.
- Shatter-proof — will not crack, chip, peel or rust.
- Completely urethane foam filled. Virtually unsinkable.
- 3"-wide reflective band at top provides excellent night visibility.
- Self-righting without tackle.
- Recessed cap allows buoy to stand upright.
- Heavy steel galvanized anchoring eye cast in an internal concrete ballast.
- Inland waterway marking symbols with standard messages included.
- Includes choice of standard symbols and messages.

Available Options

- Pickup eye built into top.
- Stainless steel anchoring eye for salt water applications.
- Agency or name identification.
- Special non-standard messages.
- Solar light (see page 11).
- Cone cap top.
- Side mooring eyes for swim areas, float lines

When ordering, specify symbols and messages desired (see bottom of page 1).

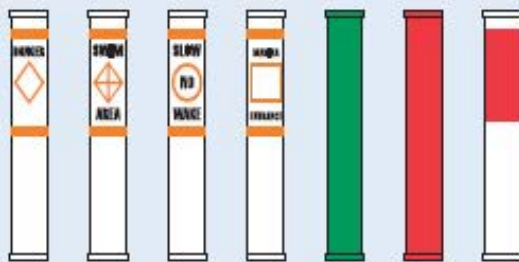
Submerged buoyancy 84 lbs.
Net weight 49 lbs.
Shipping weight 56 lbs.

Refer to installation suggestions on page 21.

NOTE: Special procedures must be followed when reconditioning HDPE type buoys. See warranty information on back cover.

EDUCATIONAL BUOYS • MINIATURE REPLICAS

Non-functional for educational use only.



Model B2510ES

• 2½" dia. x 10" identical replicas of Rolyan® regulatory buoys showing standard inland waterway symbols and messages. Set of seven buoys includes:

- Swim Area/No Boats
- Danger/Hazard
- Slow No Wake/No Wake Idle Speed
- Marina Entrance
- Red Channel Marker
- Green Channel Marker
- Centerline Marker Red & White
- Net wt. — 1.75#



Rolyan® Buoys. To Order—Call toll-free in the U.S.: 888-269-2869 • 262-387-8728 • Fax: 866-790-3298
www.RolyanBuoys.com

Barrier Floats • Durable Polyethylene

Super-tough polyethylene hull.

Barrier floats are attached in series to restrict boating traffic or swimmers from specific danger areas such as around dams, spillways and swim areas.

Features

- Shatter-proof—will not crack, chip, peel or rust.
- Unsinkable—completely urethane foam filled.
- One-piece construction.

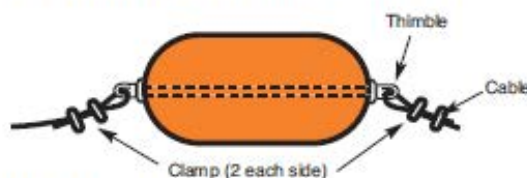


Available Options

- Available in solid international orange or all white as noted.
- Reflective bands and/or symbols available on Models B1830, B2436, and B1130.
- Yellow available on special order.
- Type B floats available with larger I.D. pipe thru center.

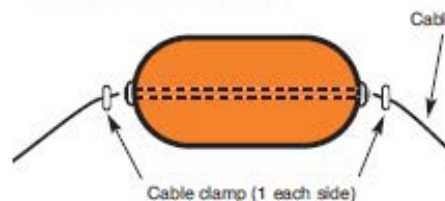
Type A

Steel rod thru float Swivel eye nuts both ends



Type B

Steel or plastic pipe thru float



Note - "W" specifies white "O" orange

Model Number	Barrier Float Styles	Dia. and Length	Type	Description—Standard colors are international orange and white, plain solid color (specify when ordering)	Sub. Buoyancy	Net Wt.
B1130AW B1130AO		12" x 13"	A	7/16" dia. galvanized steel rod with 3" dia. attachment hoop one side only.*	33 lbs.	4 lbs.
B1130BW B1130BO			B	1/2" sch. 40 PVC pipe thru float.		
B618BO		6" x 18"	A	1/2" sch. 40 PVC pipe thru	—	3 lbs.
B1318AW B1318AO		13" Dia.	A	1/2" dia. steel rod thru float. Galvanized eye nut swivels on both ends.	55 lbs.	10 lbs.
B1318BW B1318BO		18" Length	B	1/2" sch. 40 PVC pipe thru float. Anchored to prevent movement.		
Orange Only B1400AO		14" Sphere	A	7/16" dia. galvanized steel rod with 3" dia. attachment hoop one side only.*	50 lbs.	6 lbs.
B1400BO			B	1/2" sch. 40 PVC pipe thru float.		
Orange Only B1600AO		16" Sphere	A	1/2" dia. steel rod thru float. Galvanized eye nut swivels on both ends.	70 lbs.	8 lbs.
B1600BO			B	1/2" sch. 40 PVC pipe thru float.		
B1800AW B1800AO		18" Sphere	A	1/2" dia. steel rod thru float. Galvanized eye nut swivels on both ends.	—	14 lbs.
B1800BW B1800BO			B	1/2" sch. 40 PVC pipe thru float.		

* No hardware opposite side. Excellent for swim areas. (B1130A & B1400A) Optional SS hardware.



Rolyan® Buoy. To Order—Call toll-free in the U.S.: 888-269-2869 • 262-387-8728 • Fax: 866-790-3298
www.RolyanBuoy.com

Figure 6

Barrier Float Specifications Sheet
Site Warning and Protective Measures
San Jacinto River Waste Pits Superfund Site

PERMAFLEX® CABLE

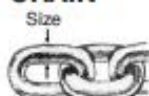
Lightweight
High strength
Safe to handle
Tough, durable, bright
yellow, waterproof
plastic covering is
highly resistant to
alkalis and salt



Covering O.D.	Part No.	Cable Dia.	Construction ①	Weight Lb./Ft.	Breaking Strength Lbs.	Standard Reel Size ②	Reel Wt. Lbs.
3/4"	B1934	3/4"	7 x 7	.028	920	1000'	28
3/8"	B1936	3/8"	7 x 7	.065	3700	500'	37
3/4"	B1931	3/4"	7 x 7	.12	6100	500'	60
3/4"	B1933	3/4"	7 x 19	.28	14400	500'	180

Permaflex Cable – Galvanized steel wire rope coated & impregnated with yellow polypropylene plastic.

CHAIN



	Size	Part No.	Weight Lb./Ft.	Working Load Limit Lbs.	Standard Drum Size ①
Proof Coil Heavy Duty Steel Chain	1/4"	B1828	.42	1300	400'
Hot Dipped Galv.	3/8"	B1829	1.36	2650	200'
	1/2"	B18210	2.3	4500	100'

NOTES: ① Chain may also be purchased by the foot. Subject to cut charge.

GALVANIZED HARDWARE



CABLE THIMBLES

Standard
Electro
Galvanized

Heavy Duty
Hot Dipped
Galvanized

Size	Part No.	Weight Lb./Ft.
3/4"	B2311	.03
3/8"	B2312	.04
3/4"	B2313	.05
3/8"	B2316	.15
3/8"	B2324	.08
3/4"	B2321	.11
3/8"	B2323	.47



CABLE CLAMPS

Standard
Electro
Galvanized

Heavy Duty
Hot Dipped
Galvanized

3/4"	B1831	.2
3/8"	B1832	.3
3/4"	B1833	.4
3/8"	B1835	.5
3/4"	B2331	.11
3/8"	B2332	.16
3/4"	B2333	.28
3/8"	B2335	.82



CONNECTING LINKS

Electro
Galvanized

3/4"	B1891	.10
3/8"	B1892	.25
3/8"	B1893	.54



QUICK LINKS

Electro
Galvanized

3/8"	B1801	.10
3/8"	B1803	.19
3/8"	B1804	.38



ANCHOR SHACKLES

Hot Dipped
Galvanized

3/4"	B1900	.25
3/8"	B1901	.30
3/8"	B1902	.75



SWIVELS

Hot Dipped
Galvanized

3/8"	B1921	.21
3/8"	B1922	.61
3/8"	B1923	.93

ANCHORS

ANCHORS CONCRETE	Avg. Wt. Lbs.	Under-water Wt. Lbs.
	90	54
	200	164
	300	180

ANCHOR KITS

	B2161 Tough, high-density polyethylene anchor form. Cast up to 300 lb. concrete anchors.
	B2163 Plastic anchor form for 90 lb. concrete anchors.
	B2162 1/2" Steel anchor eye and steel wire mesh.

Stainless steel hardware available.
Call for pricing.



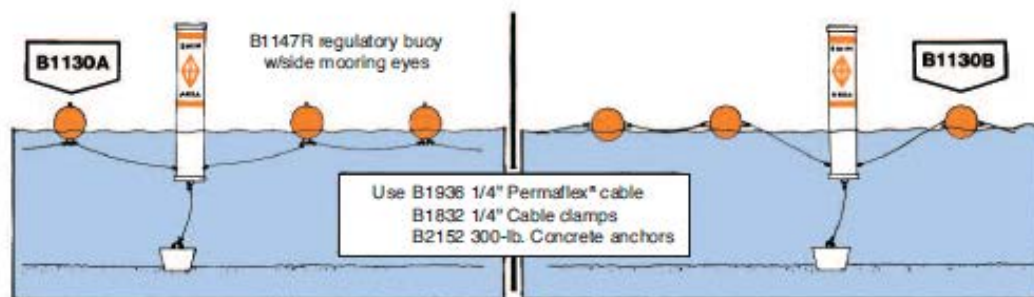
Rolyan® Buys. To Order—Call toll-free in the U.S.: 888-269-2869 • 262-387-8779 • Fax: 866-790-3298
www.RolyanBuys.com

Application and Mooring Suggestions (continued)

21

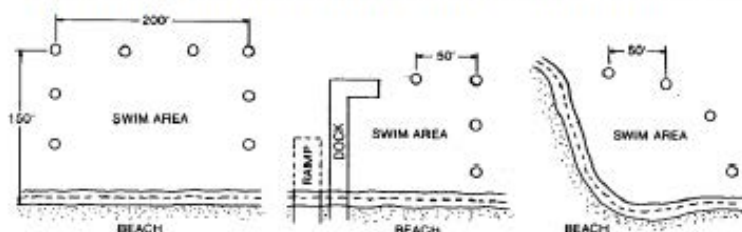
Suggestions For Using B1130 Floats with B1147R Buoys in Swim Areas

Also see chain, cable, hardware and anchor information, page 17.

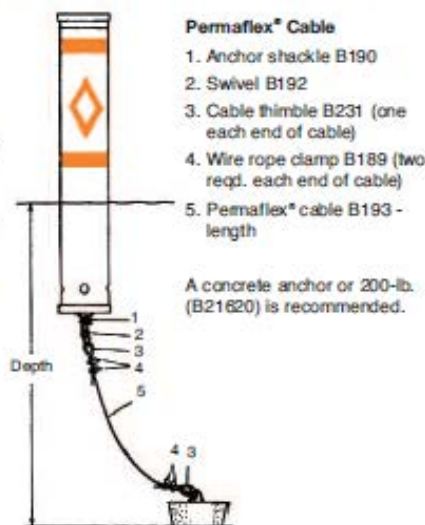
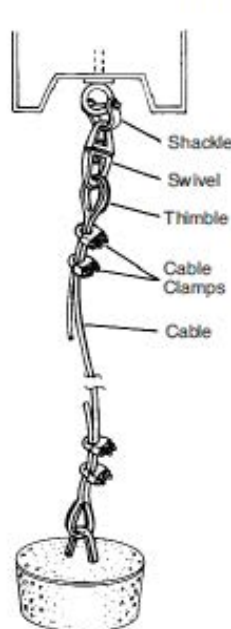


Note: The design and selection of a mooring system should be determined by a qualified professional engineer who is familiar with the specific application and local conditions. The illustrations shown are provided for informational purposes and are not intended to be suggested designs. The company assumes no responsibility for any mooring system based upon these illustrations.

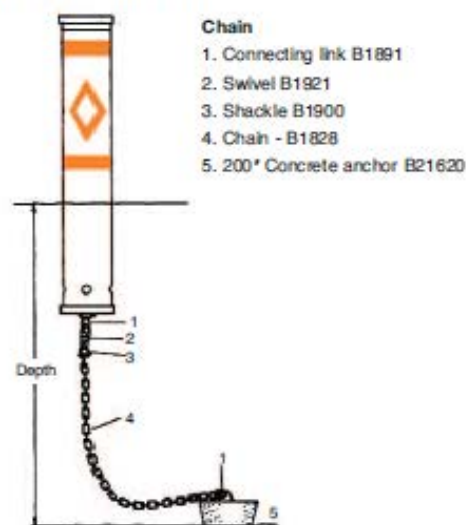
Layout Suggestions For Using B1147R Buoys In Swim Areas



Installation Suggestions for B1147R or B961R Buoys With Anchors



Permaflex® Cable		
SIZE (IN.)	PART NO.	Max. Length 1147 Type Buoys will Support
3/16"	B1934	100'
1/4"	B1936	75'
5/16"	B1931	45'
15/32"	B1933	18'



Proof Coil Chain		
SIZE (IN.)	PART NO.	Max. Length 1147 Type Buoys will Support
1/4"	B1828	12'

For cable, chain and hardware, see page 17.

Rolyan® Buoys. To Order—Call toll-free in the U.S.: 888-269-2869 • 262-387-8779 • Fax: 866-790-3298
www.RolyanBuoys.com

